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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/108,527	07/01/1998	BRENT TOWNSHEND		2530

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HICKMAN PALERMO TROUNG & BECKER  
1600 WILLOW STREET  
SAN JOSE, CA 95125-5106

EXAMINER
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TANG, KENNETH

ART UNIT	PAPER NUMBER
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2156

DATE MAILED: 07/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/108,527

Applicant(s)

TOWNSHEND, BRENT

Examiner

Kenneth Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:
  - There is a grammatical error on page 6, line 12 (“then” should be replaced with “than”);
  - There is a grammatical error on page 8, line 10 (“an” should be replaced with “a”).

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. “Signature elements” is not clearly defined in the specification.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. “Routines” is not clearly defined in the specification.

Claims 23 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. "first set of routines" is too broad and not clearly defined in the specification.

***Claim Rejections - 35 USC § 102***

3. Claims 1, 2, 10, 19, 26, 27, 29, and 32 are rejected under 35 U.S.C. 102(e) as being unpatentable by Leeds (US 2002/0016824 A1).

Referring to claims 1, 10, 26, and 29 Leeds teaches a electronic mail system and method (e-mail, page 2, 0024) which comprises the following:

- automatically generating a set of criteria based on contents of a plurality of emails ("authenticator" to determine if a received email is a junk email, page 1, 0012, Fig. 7);
- receiving an electronic mail message over a network/server (e-mail message, network, page 3, 0035, e-mail messages automatically scanned and parsed at server, page 2, 0024);
- determining whether electronic mail message satisfies set of criteria (scored to probable characteristics, origination, validity and desirability of mail, page 2, 0024, and status of mail as junk e-mail or valid message, page 2, 0025);
- if electronic mail message satisfies set of criteria, then processing electronic mail message as first type of electronic mail (junk e-mail, page 2, 0025);
- if electronic mail does not satisfy set of criteria, then processing electronic mail message as second type of electronic mail (valid message, page 2, 0025);

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- wherein first type of electronic mail is processed differently than the second type of electronic mail (verification request deliverable or undeliverable, pages 2-3, 0026).

Referring to claim 2, Leeds teaches the following:

- generating a message signature for an electronic mail message based on contents of an electronic mail message (digitally the signed part, the signature, and the unique code, page 4, 0038);
- determines whether message signature satisfies the set of criteria (check signed part of message against signature, page 4, 0038).

Referring to claim 19, it is rejected for the same reasons as in the rejection of claim 2.

Referring to claim 27, it is rejected for the same reasons as in the rejection of claim 2.

Referring to claim 32, it is rejected for the same reasons as in the rejection of claim 2.

### ***Claim Rejections - 35 USC § 103***

4. Claims 4, 5, 8, 9, 11, 15, 16, 17, 18, and 31 are rejected under 35 U.S.C. 103(a) as being obvious over Leeds (US 2002/0016824 A1).

Referring to claim 4, while Leeds teaches a confidence rating assigned to a message (page 2, 0024), he fails to explicitly teach tracking how many signature elements of electronic mail messages match. However, it would be obvious to one of ordinary skill in the art at the

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time the invention was made that the confidence rating feature of Leeds serves the same function as the signature elements tracker because this tracking of signature elements is used to calculate how “confident” the system is in determining whether the electronic mail is a junk email (page 2, 0024).

Referring to claim 5, it is rejected for the same reason as in the rejection of claim 4.

Referring to claim 8, Leeds explicitly fails to teach adding a bulk electronic mail flag to an electronic mail message. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to include a bulk electronic mail flag to the system of Leeds in order to determine when a bulk electronic mail is received.

Referring to claim 9, Leeds explicitly fails to teach a server adding a bulk electronic mail flag to an electronic mail message. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to have the server include a bulk electronic mail flag to the system of Leeds in order to determine when a bulk electronic mail is received.

Referring to claim 11, it is rejected for the same reason as in the rejection of claim 4.

Referring to claim 15, Leeds teaches the following:

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- a server receiving message signatures from emails, where each message signature includes one or more signature elements (digitally the signed part, the signature, and the unique code, page 4, 0038);
- server generating counts of matching signature elements of the emails (confidence rating assigned to message, page 2, 0024);

Leeds fails to explicitly teach having the server be a central server. However, it would have been obvious to one ordinary skill in the art at the time the invention was made that a central server could also perform the same function as a regular server. Leeds also fails to explicitly teach the central server transmitting a message that reflects the counts. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to include the feature of having a message to reflect the counts so that the user can determine the confidence rating assigned to the message (page 2, 0024).

Referring to claim 16, it is rejected for the same reasons as in the rejection of claim 15.

Referring to claim 17, Leeds fails to explicitly teach of reflecting and transmitting at the same time. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to include this feature into Leeds's system because transmitting and reflecting at the same time would increase efficiency.

Referring to claim 18, Leeds fails to explicitly teach of transmitting messages reflecting counts at the same time as transmitting signature elements associated with counts greater than the

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threshold. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to add this feature to Leeds's system in order to increase efficiency.

Referring to claim 31, it is rejected for the same reasons as in the rejection of claim 4.

5. Claim 3, 6, 7, 28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leeds (US 2002/0016824 A1) in view of Horvitz (US 6,161,130).

Referring to claim 3, Leeds fails to explicitly teach the use of matching a threshold number of email messages to a portion of the contents in the electronic mail message. However, Horvitz teaches using a threshold value to be compared against for filtering out unwanted emails (threshold value, col 4 line 67 and col 5 lines 1-15) for the reason to classify messages accordingly to some criteria. Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to include a threshold to the system of Leeds in order to have a point or value which distinguishes the difference between spam and a legitimate email (col 4, line 67, and col 5, lines 1-15).

Referring to claim 6, Leeds fails to explicitly teach using at least one signature element that matches a threshold number of signature elements. However, Horvitz does teach the use of comparing a threshold value (threshold, col 9, lines 62-67 and col 10, lines 1-2). Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to



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include a threshold value for comparison in order to have a point or value which distinguishes the difference between spam and legitimate email (col 9, lines 63 and col 10 lines 1-2).

Referring to claim 7, Leeds fails to explicitly teach the use of associating message signatures with a period of time. However, Horvitz teaches “such a technique should adapt itself to track changes, that occur over time, in both spam and non-spam content subjective user perception of spam” (col 4, lines 24-28). Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to associate message signatures with a period of time in order to keep track of when the signature was made.

Referring to claim 28, it is rejected for the same reasons as in the rejection of claim 3.

Referring to claim 30, it is rejected for the same reasons as in the rejection of claim 3.

6. Claims 12, 13, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leeds (US 2002/0016824 A1) in view of Natarajan (US 2002/0016916 A1).

Referring to claim 12, Leeds fails to explicitly teach the use of a one-way hash function for matching threshold values to portions of the message signature. However, Natarajan teaches the use of a one-way hash function for signatures. Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to include Natarajan’s teaching of a

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one-way hash function into the existing system of Leeds because it is the preferred mode to obtain a message digest (one-way hash function to obtain a message digest, page 1, 0006).

Referring to claim 13, Leeds teaches transmitting messages to an electronic mail server for generating message signatures. However, the combination system of Leeds and Natarajan fails to explicitly teach specifying changes to one or more routines invoked by the electronic mail server to perform this. It would have been obvious to one ordinary skill in the art at the time the invention was made to include the ability to use changes to one or more routines for the Leeds and Natarajan combination system because it would give the system more functionality.

Referring to claim 14, Leeds explicitly fails to teach transmitting messages by platform-independent byte code. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to add the platform-independent byte code feature to the existing combination system of Leeds and Natarajan so that it can run on any given system.

Referring to claim 20, Leeds explicitly fails to teach using a one-way hash function that receives content from an email as input and a message signature as output. However, Natarajan teaches using a one-way hash function that receives the "source data of the digital object" as input and outputs an "encrypted message digest" (0006). Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to include the one-way hash function with these I/O features of Natarajan to the system of Leeds because it is well known that it is a technique for identifying a digital object (0006).

7. Claims 21-25, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leeds (US 2002/0016824 A1) in view of Shaw (US 20020026634).

Referring to claims 21-23, Leeds fails to explicitly teach using a remote server for generating message signatures. However, Shaw teaches using the remote server (Figure 1, 60) to receive code (page 2, 0030) and for signatures (page 2, 0030 and 0031). Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to make the server of Leeds remote because it is well known that it can already be done.

Referring to claim 24, the combination system of Leeds and Shaw fails to explicitly teach using platform-independent byte code. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to include this feature to the existing Leeds and Shaw system in order for it to have the flexibility to operate on any given system.

Referring to claim 25, the combination system of Leeds and Shaw fails to explicitly teach using machine executable code. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to include this feature to the existing Leeds and Shaw system so that any programs can be executed.

Referring to claim 33, it is rejected for the same reasons as in the rejection of claim 23.

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Referring to claim 34, it is rejected for the same reasons as in the rejection of claim 24.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (703) 305-5334. The examiner can normally be reached on 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alvin Oberley can be reached on (703)305-9716. The fax phone numbers for the organization where this application or proceeding is assigned are none for regular communications and none for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is none.

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June 27, 2002

  
MAJID BANANKHAH  
PRIMARY EXAMINER